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Agricultural Memorandum No 499

Formulae for loss in yields due to late sowing

Area 3

L P Smith

Area 3 is the area of low sensitivity to reduction in schedules (Ag Mem 492)

If x_3 is the drainage factor, where Good drainage = 1
Moderate drainage = 1.3
Poor drainage = 1.7
Bad drainage = 2.1

and y is the number of days in the schedule
then the loss percentages in yield are:-

		Correlation x_3y : data
Horsham	$0.47x_3y - 1.5$	0.993
Cheltenham	$0.49x_3y + 0.1$	0.980
Worcester	$0.45x_3y - 0.9$	0.993
Stratford	$0.38x_3y + 0.2$	0.998
Oxford	$0.38x_3y - 0.9$	0.985
Aylesbury	$0.44x_3y - 0.5$	0.986

Example: If near Stratford the drainage was poor and the schedule 10 days the loss would be

$$0.38 \times 1.7 \times 10 + 0.2 = 6.5 + 0.2 = 6.7\%.$$

Changing this to moderate drainage and a 7 day schedule would give a loss

$$0.38 \times 1.3 \times 7 + 0.2 = 3.5 + 0.2 = 3.7\%.$$

a gain of about 3 percent of total yield.

Any comments or suggestions on this paper should be referred to the author.

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